

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1 - 17 (Cancelled)

18. (Currently Amended) An optical probe comprising: [[The optical probe of claim 16, further comprising:]]

a prism having a rounded top;

a first waveguide in or on a bottom portion of the prism, the rounded top to focus light entering the prism into the first waveguide; and

a second waveguide in or on the bottom portion of the prism, wherein the rounded top constitutes more than one focus to couple light into the first waveguide and the second waveguide.

19. (Currently Amended) The optical probe of claim [[16]] 29, wherein the light entering the rounded top is capable of being redirected approximately 90 degrees by the prism and the first waveguide.

20. (Currently Amended) An optical probe comprising: [[The optical probe of claim 16,]]

a prism having a rounded top; and

a first waveguide in or on a bottom portion of the prism, the rounded top to focus light entering the prism into the first waveguide,

wherein the rounded top comprises a microlens array.

21. (Previously Presented) A method of making an optical probe, the method comprising:

forming a lens surface on a prism; and

forming a waveguide in or on a bottom portion of the prism.
22. (Original) The method of claim 21, wherein the waveguide is formed by diffusion or ion exchange.
23. (Original) The method of claim 21, wherein the waveguide is formed by ion implantation.
24. (Original) The method of claim 21, wherein the waveguide is formed by deposition.
25. (Previously Presented) The method of claim 21 further comprising:

forming a second waveguide in or on the bottom portion of the prism.
26. (Original) The method of claim 21, wherein forming the lens surface on the prism further comprises

forming a lens surface having more than one focus.
27. (Original) The method of claim 21, wherein forming the lens surface on the prism further comprises

forming a lens surface having a microlens array.

28. (Currently Amended) The optical probe of claim [[16]] 31, wherein the prism is at least partially made of sapphire, high density glass, LiNbO_3 , or rutile.
29. (Currently Amended) An optical probe comprising: [[The optical probe of claim 16,]]
- a prism having a rounded top; and
- a first waveguide in or on a bottom portion of the prism, the rounded top to focus light entering the prism into the first waveguide,
- wherein the first waveguide comprises an integrated waveguide.
30. (Currently Amended) An optical probe comprising: [[The optical probe of claim 16,]]
- a prism having a rounded top; and
- a first waveguide in or on a bottom portion of the prism, the rounded top to focus light entering the prism into the first waveguide,
- wherein the first waveguide has a higher index of refraction than the prism.
31. (Currently Amended) An optical probe comprising: [[The optical probe of claim 16,]]
- a prism having a rounded top; and
- a first waveguide in or on a bottom portion of the prism, the rounded top to focus light entering the prism into the first waveguide,

wherein the first waveguide has an end selected from an abrupt end and a graded end.

32. (Previously Presented) The method of claim 21, wherein the waveguide is formed within the prism.